

What is claimed is:

1. Method for rapid detection of live cells by detection of micro colonies produced by these cells which method comprises:
growing of micro colonies in a small and thin channels of the device consisting from micro channel plate, filter to trap cells and frame in order to form long cylindrical micro colonies, as a result of growth on solid nutrient media in order to increase their visualization with optical instruments by changing optical characteristics of light passing through the channels, where channels contain micro colonies will look different from empty channels optical characteristics.
2. The method of claim 1 wherein micro colonies formed in long and thin channels with a shape another than cylinder.
3. The method of claim 1 wherein device placed in liquid nutrient media and trapped cell produces suspension of cells in a channel.
4. The method of claim 1 wherein micro channel plate filled by liquid nutrient media and placed on examined surface, or a surface covered by nutrient media and micro channel plate put on after.
5. The method of claim 1 wherein optical characteristics changed as a result of adding of artificial substrate produced colored or fluorescent substance or other substance to colorize cells or use physical methods to change optical characteristics of channels containing cells like heating to coagulate proteins, add hydrogen peroxide to produce micro bubbles or grow cells in highly colored liquid nutrient media and observe the increasing of light transmittance in the channels with growing cells.